

**Transactionism in the Built Environment;
An Examination on user personalization and modifications in urban
middle-income apartment complexes**

The dissertation submitted for the
Degree of Master of Science (Architecture)
At the University of Moratuwa, Sri Lanka
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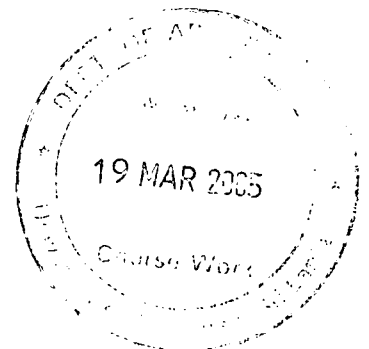
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Declaration

I declare that this dissertation represent my own work, except where due acknowledgement is made, and that it has not been previously included in a thesis, dissertation or a report submitted to this University or to any other institution for a degree, diploma or other qualification.



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Abstract.

Urbanization and the migration of population to the cities have raised an unavoidable question of accommodating those people in lands with high prizes. Today, some people have to deal with High-rise living weather they like it or not, considering other conveniences for their life and most of all, compromising their ideals on “home”, their most personal domain. It is evident that failure to understand the values and aspirations of the people has resulted in lukewarm spatial experience of people.

The needs of personalization of the spaces people occupy never changes. Though apartment complexes allow little variations to be done by the users, identification of probable user needs lead to more flexible designs, which can facilitate the user modifications according to their needs. But this approach needs a good understanding about the relationship between built environment and human behavior and what a “Home” means to a person.

Therefore, this dissertation is an attempt to identify the relationship between built environment and human behavior and the unchanging need to personalize the built space they accommodate. The identification of the ways to facilitate transactions in user personalization in a positive way will be the theme of the attempt.

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Introduction

▪ **Background of the study**

Today, the complex situations that Man has faced due to his own actions have lead to design buildings vertically, instead of spreading horizontally; including homes, which means many things to him other than provision of mere shelter. Not only the high land values due to Urbanization, but also the conveniences for day today activities, easy accessibility to the work place, have left many people the choice of compromising the sole “Home” concept and to satisfy with the state provided apartment complexes.

It is evident that the users are constantly modifying the apartment complexes provided by the government. Therefore the study of the reasons for such changes and the way modifications are carried out facilitates to create more meaningful built environments. Therefore the study focuses on the relationship between human behavior and the built environment and on resultant transactions.

Man, as a living organism, constantly reacts to his surrounding. With the complex situations he faces, the behavioral attitudes of man also change. Some ideologies have applied this situation to built environment, arguing that the behavior of the man depend on the built environment.

*Therefore in the evolution of built environment, three main stages are identified according to the degree in which the environmental impact on the user behavior. It is based on the idea “Environment has empowered decision-making towards human behavior”. The stages identified are namely Determinism, interactionism, **transactionism***

The theory behind Transactionism is “man is an active organism and the built environment is a setting to support to facilitate and sustain human behavior”.

So that, when people find that the built environment does not accommodate their intended behaviors, they change the built environment to suit their requirements. There has been emerged a new field of study called “man environment studies” as a systematic study to identify the mutual interaction of people and built environment.

It is concerned with what to design and why and the ways to arrive at the human criteria of the design based on an understanding of man environment interaction.

According to Rapoport .A, three basic questions should be answered for this arrival,

1. How do people shape their environment? Which characteristics of people as individuals or groups of different sizes are relevant to the shaping of a particular environment?
2. How and to what extent does the physical environment affect people? i.e. how important is the designed environment and in what context?
3. What are the mechanisms which link people and environments in this two way interaction? (1976:1-6)

These questions should be answered when identifying relevant design issues, which facilitate transactionism.

But, there can be restrictions for the process, limiting the capabilities of modifying the environment as user wishes. These factors can control the power the user has over the environment. Resources including finance, personality of the user, time and technology, environmental role of the use can be mentioned as examples.

Though there is a criticism for transactionism, stating that architects delegate parts of their tasks to users, it is argued by the transactionists stating that the provision of a flexible built environments for modifications and alterations promise high degree of user satisfaction.

According to Christopher Alexander, this modifying of immediate situation does not exceed the cultural bonds. He identifies some patterns, which are related with these modifications.

“ A person can modify his immediate situations. He can move, change his life and so on. In exceptional cases he can almost change them almost wholly. But it is not possible to go beyond the bounds of collection of events and pattern of events which our culture makes available to us.” (1979:69)

To mention the other two stages in brief,

Determinism is based on the view that Architectural design has an effect on the way people behave. Broadly(1996)has called this “Architectural Determinism”. It is assumed that, there is a casual relationship between the physical environment and the behavior of its occupants, which has given rise to the notion “Form follows Function”; which says that architectural form and environment is determined by the behaviors.

Though this led to avoid needless ornamentation, many criticized the extreme passivity implied by this and it reduced the popularity of this attitude. One of the criticisms by Sommer.R on the fact that Form follows Function says that,

“ Architecture may be beautiful, but it should be more than that, it must enclose space in which certain activities can take place comfortably and efficiently. Not only must form follow function, but also it must assist it in every way. The personal expression of the Architect must yield to the functions that building serves”(Sommer.R. 1969:05)

The deviations occurred when the deterministic attitudes could not support the user in their day today activities and this led to search for alternative attitudes for design.

Interactinism is based on a view stating there is no major effect on people because of built environment. According to this theory, the social, economic and other similar

environments called “interactions” effect on the built environment as major important factors in deciding the built environment.

It was seen that it reduced architecture in to just beautiful buildings and aesthetics alone. Though negligence of the social relevance of architecture was a major weak point in this theory, it was seen that it was popular among some architects. Among the criticisms of this approach, Bill Riseboro’s statement has a high significance.

“Architecture should be seen not only in aesthetic terms, but also as an important aspect of our social life, effected by and in some ways effecting our economic system and the changes which take place within it”(1992:02)

The study focuses on transactionism in the built environment, related to urban middle-income apartment complexes because it directly deals with the human criteria of a design.



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▪ **Need of the study**

Mass housing has been an issue architects constantly have to deal with. There have been programs on mass housing schemes launched to supply the demand of housing in Sri Lanka, mostly around Colombo and sub urban areas. It is evident that with the rapid urbanization, building vertically has become a trend and it also is seen in housing, as apartment complexes.

Though separation from the land became an issue, people have to bear with it, considering other conveniences for their life in the urban environment.

But the need to personalize the space he occupies as a human being, specially his most private domain- the “Home”, is an unchanging issue both the user and the creator of the built environment, the architect has to deal with.

Therefore, it is a vital need to identify the issues related with the user needs of personalization, attributes of home, and the design issues that enhance and facilitate personalization of apartment complexes.

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▪ **Objectives of the study**

The objective of the dissertation is to identify the relationship between built environment and human behavior and transactionism in the built environment. Then identify the unchanging need to personalize the built space people accommodate, which lead the Architects to think about the issues of designing of adoptable spaces in high rise living. This study expects to, identify the concept of “home”, the process of home making and the user needs, which lead to modify the provided built environment in the process of home making.

Then, Examine the extent to which this undertaking could be utilized to transfer the housing process to be flexible in apartment complexes, examine what level transactions could be facilitated ensuring personalizing in housing specially in the situation of apartment complexes.



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▪ **Method of the study**

- . The study will firstly examine with theories the relationship between human behavior and built environment and establish the concept of transactionism.
- Next, it will attempt to identify personalization of their environment as a basic need and the way a design approach can facilitate to create a more meaningful character of the space for the inhabitants.
- The dissertation will proceed identifying the concept of “home” and the attributes of it, and the way it is created according to the wishes of the inhabitants.
- It will then look at “Housing” as a social problem, its social needs and then focus on emergence of the apartment concept as it deals with the transactions in the built environment.
- A case study approach will be applied to study the actual situation and the findings will be discussed with theories to identify transactions in the built

environment in the apartment complexes for middle-income group in the urban context.

- The social aspects and the designed housing context are a prime importance in mass housing situations because it directly affect on the user's mindset and emotions. Therefore, the integration of attributes of the concept of "Home" to large-scale home environments would be discussed in the case studies, identifying the way the design approaches have contributed to transactionism without limiting the study to a particular housing unit.

The case studies will look at,

- How do people shape their environment? Which characteristics of people as individuals or groups of different sizes are relevant to the shaping of a particular environment?
- How and to what extent does the physical environment affect people? i.e. how important is the designed environment and in what context?
- What are the mechanisms, which link people and environments in this two-way interaction? (1976:1-6)

Finally it will attempt to identify the design probabilities to facilitate transactionism of the related theme.

▪ **Scope and limitations of the study**

The particular study has its own inherent scope and limitations.

The study limits its scope to the apartment complexes for middle-income category from the three categories. i.e. high income, middle income and low income because of the breadth of the theme and each group's inherent approaches and behaviors related to the theme.

The same type- apartment complexes for middle income group in different contexts are selected to make a reasonable comparison regarding the way people and the built environment are subjected to transactionism, in the process of personalizing their built environment.